(No Model.)

C. E. ANDREWS.

SPRING SHANK FOR BOOTS OR SHOES.

No. 324,065. Patented Aug. 11, 1885.

FIG. 1.

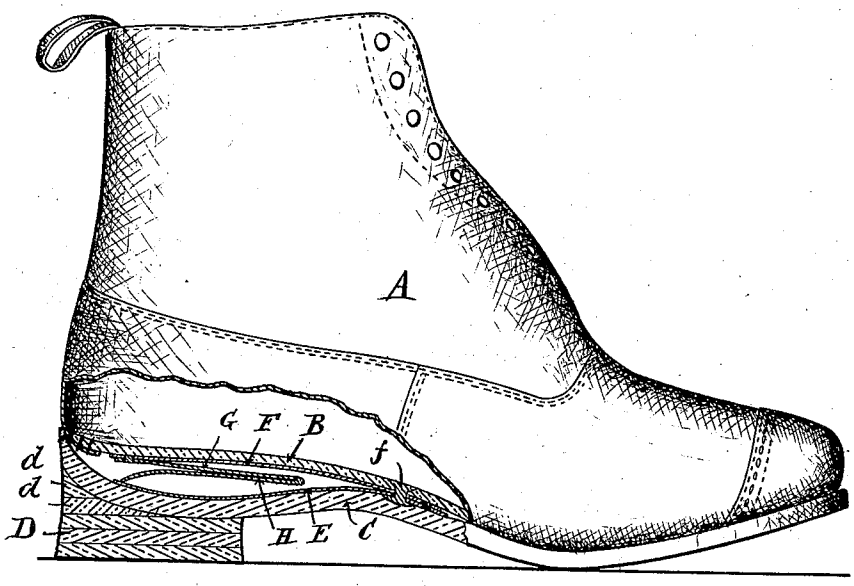
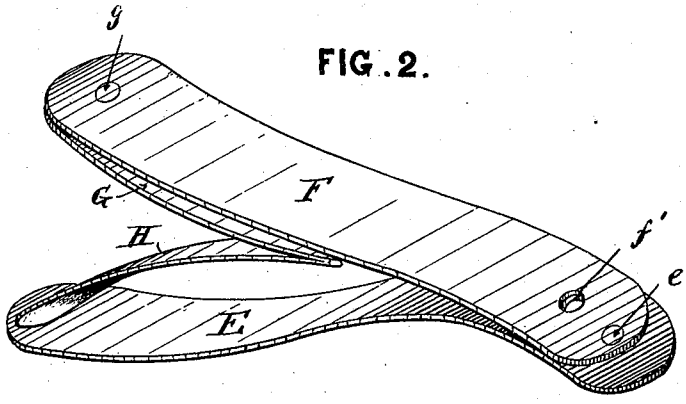


FIG. 2.



Witnesses.
E. Blanks.
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UNITED STATES PATENT OFFICE.

CHARLES E. ANDREWS, OF BOSTON, MASSACHUSETTS.

SPRING-SHANK FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 324,065, dated August 11, 1885.

Application filed December 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. ANDREWS, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Spring-Shanks for Boots or Shoes, of which the following is a specification.

The object of my invention is to provide a means for imparting an elasticity to the tread of the foot in a boot or shoe while walking, and also for supporting the shank of the foot.

The invention consists in the employment of a double V-spring placed in the shank and heel of a boot or shoe and secured to the inner sole of the same. The said spring is composed of a semi-elliptic portion having one end free, and secured at its other end to a flat metal bar or strap, and secured to the inner sole of the boot or shoe.

Referring to the accompanying drawings, Figure 1 represents a shoe partially in section, and showing my invention in place in a shoe. Fig. 2 is a perspective view of the spring.

A represents a shoe, a portion being broken away. B is the inner and C the outer sole, and D is the heel. Between the inner sole, B, and outer sole, C, is placed a double V-spring, composed of a semi-elliptic portion, E, riveted at one end, *e*, to a metal bar or strap, F. To the outer or free end of the strap F is riveted one end, G, of the inner V-spring, the other end, H, being left free, so as to bear upon or against the semi-elliptic spring E. This double V-spring is secured between the inner sole, B, and outer sole, C, by means of a rivet, *f*, passing through the shank of the inner sole, B, and through a hole, *f'*, in the forward ends of the bar F and the semi-elliptic spring E, after which it is riveted over, as shown in Fig. 1.

It will be seen that by the insertion of the spring between the inner and outer soles the outer sole will be caused to bulge out at the heel, so that in putting on the heel it will be necessary to first put on two or more split lifts, *d d*, in order to bring the rear and sides of the heel to a level with the center, after which the heel is made up in the usual manner.

The bar or strap E is made to conform to the contour of the inner sole, so that the latter will always retain its form, while at the same time it will be free to yield slightly as the shoe touches the ground while the wearer is walking.

For children or ladies or persons of light weight the inner V-spring may be dispensed with, and a single leaf may be inserted in place of the inner V-spring.

What I claim as my invention is—

The combination, with a boot or shoe sole, of a spring, E, attached at one end to the end of a bar or strap, F, and the interposed V-spring G H, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES E. ANDREWS.

Witnesses:

J. H. ADAMS,

E. PLANTA.